



SEQUENCE LISTING

<110> Polyan, Kornelia
Porter, Dale
Sgroi, Dennis
Krop, Ian

<120> HIN-1, A TUMOR SUPPRESSOR GENE

<130> 00530-094001

<140> 10/081,817

<141> 2002-02-22

<150> 60/270,973

<151> 2001-02-23

<150> 60/351,908

<151> 2002-01-25

<160> 32

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1

Met Lys Leu Ala Ala Leu Leu Gly Leu Cys Val Ala Leu Ser Cys Ser
1 5 10 15
Ser Ala Arg Ala Phe Leu Val Gly Ser Ala Lys Pro Val Ala Gln Pro
20 25 30
Val Ala Ala Leu Glu Ser Ala Ala Glu Ala Gly Ala Gly Thr Leu Ala
35 40 45
Asn Pro Leu Gly Thr Leu Asn Pro Leu Lys Leu Leu Leu Ser Ser Leu
50 55 60
Gly Ile Pro Val Asn His Leu Ile Glu Gly Ser Gln Lys Cys Val Ala
65 70 75 80
Glu Leu Gly Pro Gln Ala Val Gly Ala Val Lys Ala Leu Lys Ala Leu
85 90 95
Leu Gly Ala Leu Thr Val Phe Gly
100

<210> 2

<211> 86

<212> PRT

<213> Homo sapiens

<400> 2

Arg Ala Phe Leu Val Gly Ser Ala Lys Pro Val Ala Gln Pro Val Ala
1 5 10 15
Ala Leu Glu Ser Ala Ala Glu Ala Gly Ala Gly Thr Leu Ala Asn Pro
20 25 30
Leu Gly Thr Leu Asn Pro Leu Lys Leu Leu Leu Ser Ser Leu Gly Ile

35 40 45
 Pro Val Asn His Leu Ile Glu Gly Ser Gln Lys Cys Val Ala Glu Leu
 50 55 60
 Gly Pro Gln Ala Val Gly Ala Val Lys Ala Leu Lys Ala Leu Leu Gly
 65 70 75 80
 Ala Leu Thr Val Phe Gly
 85

<210> 3
 <211> 312
 <212> DNA
 <213> Homo sapiens

<400> 3
 atgaagctcg ccgccctcct ggggctctgc gtggccctgt cctgcagctc cgctcgtgct 60
 ttcttagtgg gctcggccaa gcctgtggcc cagcctgtcg ctgcgctgga gtcggcggcg 120
 gaggccgggg ccgggaccct ggccaacccc ctcggcaccc tcaaccgct gaagctcctg 180
 ctgagcagcc tgggcatccc cgtgaaccac ctcatagagg gctcccagaa gtgtgtggct 240
 gagctgggtc cccaggccgt gggggccgtg aaggccctga aggcctgct gggggccctg 300
 acagtgttg gc 312

<210> 4
 <211> 258
 <212> DNA
 <213> Homo sapiens

<400> 4
 cgtgctttct tagtgggctc ggccaagcct gtggcccagc ctgtcgctgc gctggagtcg 60
 ggggcccagg ccggggccgg gaccctggcc aaccctctcg gcacctcaa cccgctgaag 120
 ctctgtctga gcagcctggg catcccctg aaccacctca tagagggtc ccagaagtgt 180
 gtggctgagc tgggtcccca ggccgtgggg gccgtgaagg ccctgaaggc cctgctgggg 240
 gccctgacag tgtttggc 258

<210> 5
 <211> 104
 <212> PRT
 <213> Mus musculus

<400> 5
 Met Lys Leu Thr Thr Thr Phe Leu Val Leu Cys Val Ala Leu Leu Ser
 1 5 10 15
 Asp Ser Gly Val Ala Phe Phe Met Asp Ser Leu Ala Lys Pro Ala Val
 20 25 30
 Glu Pro Val Ala Ala Leu Ala Pro Ala Ala Glu Ala Val Ala Gly Ala
 35 40 45
 Val Pro Ser Leu Pro Leu Ser His Leu Ala Ile Leu Arg Phe Ile Leu
 50 55 60
 Ala Ser Met Gly Ile Pro Leu Asp Pro Leu Ile Glu Gly Ser Arg Lys
 65 70 75 80
 Cys Val Thr Glu Leu Gly Pro Glu Ala Val Gly Ala Val Lys Ser Leu
 85 90 95
 Leu Gly Val Leu Thr Met Phe Gly
 100

<210> 6
 <211> 85
 <212> PRT

<213> Mus musculus

<400> 6

Val Ala Phe Phe Met Asp Ser Leu Ala Lys Pro Ala Val Glu Pro Val
 1 5 10 15
 Ala Ala Leu Ala Pro Ala Ala Glu Ala Val Ala Gly Ala Val Pro Ser
 20 25 30
 Leu Pro Leu Ser His Leu Ala Ile Leu Arg Phe Ile Leu Ala Ser Met
 35 40 45
 Gly Ile Pro Leu Asp Pro Leu Ile Glu Gly Ser Arg Lys Cys Val Thr
 50 55 60
 Glu Leu Gly Pro Glu Ala Val Gly Ala Val Lys Ser Leu Leu Gly Val
 65 70 75 80
 Leu Thr Met Phe Gly
 85

<210> 7

<211> 312

<212> DNA

<213> Mus musculus

<400> 7

atgaagctta ccaccacctt tctagtgtct tgtgtggctc tgctcagtga ctctgggtgtt 60
 gcttttctca tggactcatt ggccaagcct gcggtagaac ccgtggccgc ccttgctcca 120
 gctgcagagg ctgtggcagg ggctgtgcct agcctaccat taagccactt ggccatcctg 180
 aggttcatcc tggccagcat gggcatccca ttggatcctc tcatagaggg atccaggaag 240
 tgtgtcaccg agctgggccc tgaggctgta ggagctgtga agtcactgct ggggggtcctg 300
 acaatgttcg gt 312

<210> 8

<211> 255

<212> DNA

<213> Mus musculus

<400> 8

gttgctttct tcatggactc attggccaag cctgcggtag aaccctgtggc cgcccttgct 60
 ccagctgcag aggctgtggc aggggctgtg cctagcctac cattaagcca cttggccatc 120
 ctgaggttca tcctggccag catgggcatc ccattggatc ctctcataga gggatccagg 180
 aagtgtgtca ccgagctggg ccctgaggct gtaggagctg tgaagtcact gctggggggtc 240
 ctgacaatgt tcggt 255

<210> 9

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 9

gagggaaagt tttttttatt tgg

23

<210> 10

<211> 22

<212> DNA

<213> Artificial Sequence

<220>
<223> primer

<400> 10
caaaactaac aaaacaaaac ca

22

<210> 11
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 11
gttaagagga agttttcgag gttc

24

<210> 12
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 12
ggtacgggtt ttttacggtt cgtc

24

<210> 13
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 13
aactttcttat acccgatcct cg

22

<210> 14
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 14
gttaagagga agtttttgag gttt

24

<210> 15
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 15
gggatggggtt ttttatgggtt tggt

24

<210> 16
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 16
caaaacttct tatacccaat cctca

25

<210> 17
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 17
tttccctgct tccacactag c

21

<210> 18
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 18
agattaagaa ggaattgacc t

21

<210> 19
<211> 547
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 186
<223> n = C or G

<400> 19
cggccgggga ggccggccggg agtgaggcct gatcgctccct ggccgctcca cctccccagg 60
cgcagaaggc gcccacgagg acccccagtg cccgacgttg ccacggctctg ggatcagagg 120
cagggaccag ggagccagga actgcgccgc cccgcgcctg cctggcgcgga ggaagctccc 180
tcaccngagg gaagctcccc tcaccgggcc cagccctgag gggggcgcggt ggggtcagac 240
cgcaaagcga aggtgcgggc cggggtgggc ctgcgcggaga caaaggccgg gcctgcctct 300
ctcagagggc cccagcgccct gccaaagagga agtcctcgag gcccgggcag ggaagggggc 360
acgggcttcc cagggccccgc cggccgcagc aggaagtgg ccagggcacg gccgtgagcg 420
gagcgggcag ggcttttctca ggagcgccgg cgaggccggc gctggagggg cgaggaccgg 480
gtataagaag cctcgtggcc ttgcccgggc agccgcaggt tccccgcgcg ccccgagccc 540

ccgcgcc

547

<210> 20
 <211> 279
 <212> DNA
 <213> Rattus norvegicus

<400> 20
 gttctctgtt ttgtgttggg aggcgttgct ttcttggtgg attcactggc caagcctgtg 60
 gtagaaccgc tggctgccat tgctacagct gcagaggctg tggcaggggc tgtgcctagc 120
 ctaccattaa gccacttggc catcctgagg ttcacgtga ccagcctggg catccattg 180
 gatcctctca tagatgggtc caggaagtgc gtcaccgagc tgggcctga ggctgtagga 240
 gctgtgaagt cactgctggg ggcctgaca acgttcggt 279

<210> 21
 <211> 93
 <212> PRT
 <213> Rattus norvegicus

<400> 21
 Val Leu Cys Phe Val Leu Val Gly Val Ala Phe Leu Val Asp Ser Leu
 1 5 10 15
 Ala Lys Pro Val Val Glu Pro Val Ala Ala Ile Ala Thr Ala Ala Glu
 20 25 30
 Ala Val Ala Gly Ala Val Pro Ser Leu Pro Leu Ser His Leu Ala Ile
 35 40 45
 Leu Arg Phe Ile Val Thr Ser Leu Gly Ile Pro Leu Asp Pro Leu Ile
 50 55 60
 Asp Gly Ser Arg Lys Cys Val Thr Glu Leu Gly Pro Glu Ala Val Gly
 65 70 75 80
 Ala Val Lys Ser Leu Leu Gly Ala Leu Thr Thr Phe Gly
 85 90

<210> 22
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 22
 Phe Leu Val Gly Ser Ala Lys Pro Val Ala Gln Pro Val Ala Ala Leu
 1 5 10 15
 Glu Ser Ala Ala Glu Ala Gly Ala Gly Thr Leu Ala Asn Pro Leu Gly
 20 25 30
 Thr Leu Asn Pro Leu Lys Leu Leu Leu Ser Ser Leu Gly Ile Pro Val
 35 40 45
 Asn His Leu Ile Glu Gly Ser Gln Lys Cys Val Ala Glu Leu Gly Pro
 50 55 60
 Gln Ala Val Gly Ala Val Lys Ala Leu Lys Ala Leu Leu Gly Ala Leu
 65 70 75 80
 Thr Val Phe Gly

<210> 23
 <211> 252
 <212> DNA
 <213> Homo sapiens

<400> 23
 ttcttagtgg gctcggccaa gcctgtggcc cagcctgtcg ctgcgctgga gtcggcgggcg 60
 gaggccgggg cgggaccct ggccaacccc ctcggcaccc tcaaccgct gaagctcctg 120
 ctgagcagcc tgggcatccc cgtgaaccac ctcatagagg gctcccagaa gtgtgtggct 180
 gagctgggtc cccaggccgt gggggccgtg aaggccctga aggcctgct gggggccctg 240
 acagtgttg gc 252

<210> 24
 <211> 83
 <212> PRT
 <213> Mus musculus

<400> 24
 Phe Phe Met Asp Ser Leu Ala Lys Pro Ala Val Glu Pro Val Ala Ala
 1 5 10 15
 Leu Ala Pro Ala Ala Glu Ala Val Ala Gly Ala Val Pro Ser Leu Pro
 20 25 30
 Leu Ser His Leu Ala Ile Leu Arg Phe Ile Leu Ala Ser Met Gly Ile
 35 40 45
 Pro Leu Asp Pro Leu Ile Glu Gly Ser Arg Lys Cys Val Thr Glu Leu
 50 55 60
 Gly Pro Glu Ala Val Gly Ala Val Lys Ser Leu Leu Gly Val Leu Thr
 65 70 75 80
 Met Phe Gly

<210> 25
 <211> 249
 <212> DNA
 <213> Mus musculus

<400> 25
 ttcttcattgg actcattggc caagcctgcg gtagaaccg tggccgccct tgctccagct 60
 gcagaggctg tggcaggggc tgtgcctagc ctaccattaa gccacttggc catcctgagg 120
 ttcacctctg ccagcatggg catccattg gatcctctca tagagggatc caggaagtgt 180
 gtcaccgagc tgggccctga ggctgtagga gctgtgaagt cactgctggg ggtcctgaca 240
 atgttcggt 249

<210> 26
 <211> 249
 <212> DNA
 <213> Rattus norvegicus

<400> 26
 ttcttggtgg attcactggc caagcctgtg gtagaaccg tggctgccat tgctacagct 60
 gcagaggctg tggcaggggc tgtgcctagc ctaccattaa gccacttggc catcctgagg 120
 ttcacgtga ccagcctggg catccattg gatcctctca tagatgggtc caggaagtgc 180
 gtcaccgagc tgggccctga ggctgtagga gctgtgaagt cactgctggg ggccctgaca 240
 acgttcggt 249

<210> 27
 <211> 83
 <212> PRT
 <213> Rattus norvegicus

<400> 27
 Phe Leu Val Asp Ser Leu Ala Lys Pro Val Val Glu Pro Val Ala Ala

1 5 10 15
 Ile Ala Thr Ala Glu Ala Val Ala Gly Ala Val Pro Ser Leu Pro
 20 25 30
 Leu Ser His Leu Ala Ile Leu Arg Phe Ile Val Thr Ser Leu Gly Ile
 35 40 45
 Pro Leu Asp Pro Leu Ile Asp Gly Ser Arg Lys Cys Val Thr Glu Leu
 50 55 60
 Gly Pro Glu Ala Val Gly Ala Val Lys Ser Leu Leu Gly Ala Leu Thr
 65 70 75 80
 Thr Phe Gly

<210> 28
 <211> 109
 <212> PRT
 <213> *Drosophila melanogaster*

<400> 28
 Met Phe Lys Leu Ser Ala Leu Val Val Leu Cys Ala Leu Val Ala Cys
 1 5 10 15
 Ser Ser Ala Glu Pro Lys Pro Ala Ile Leu Ala Ala Ala Pro Val Val
 20 25 30
 Ala Ala Ala Pro Ala Gly Val Val Thr Ala Thr Ser Ser Gln Tyr Val
 35 40 45
 Ala Arg Asn Phe Asn Gly Val Ala Ala Ala Pro Val Val Ala Ala Ala
 50 55 60
 Tyr Thr Ala Pro Val Ala Ala Ala Tyr Thr Ala Pro Val Ala Ala
 65 70 75 80
 Ala Ala Tyr Thr Ala Pro Val Ala Ala Ala Tyr Ser Ala Tyr Pro Tyr
 85 90 95
 Ala Ala Tyr Pro Tyr Ser Ala Ala Tyr Thr Thr Val Leu
 100 105

<210> 29
 <211> 327
 <212> DNA
 <213> *Drosophila melanogaster*

<400> 29
 atgttcaagc tgtctgcctt cgttgtcctg tgcgctctgg tggcctgctc ctcggtgag 60
 cccaagcccg ctatcctggc cgcgctcca gtggttgag ctgctcctgc cggcgtgggc 120
 accgctacca gttcgagta cgtggccgc aacttcaacg gtgtggctgc tgcctcagtt 180
 gttgccgctg cctacaccgc tccagttgcc gccgctgcct ataccgctcc agtgccgcc 240
 gctgcttata ccgctccagt tgccgctgcc tactctgctt atccgtatgc cgcctaccct 300
 tacagcgtg catacaccac tgttttg 327

<210> 30
 <211> 137
 <212> PRT
 <213> *Drosophila melanogaster*

<400> 30
 Met Lys Phe Leu Ala Val Cys Phe Phe Ala Val Val Ala Val Ala Ala
 1 5 10 15
 Ala Lys Pro Gly Ile Val Ala Pro Leu Ala Tyr Thr Ala Pro Ala Val
 20 25 30
 Val Gly Ser Ala Ala Tyr Val Ala Pro Tyr Ala Ser Ser Tyr Thr Ala

35 40 45
 Asn Ser Val Ala His Ser Ala Phe Pro Ala Ala Tyr Thr Ala Ala
 50 55 60
 Tyr Thr Ala Pro Val Ala Ala Tyr Thr Ala Pro Val Ala Ala Ala
 65 70 75 80
 Tyr Thr Ala Pro Val Ala Ala Tyr Ala Ala Pro Ala Ala Tyr Thr
 85 90 95
 Ala Ala Tyr Thr Ala Pro Ile Ala Arg Tyr Ala Ala Thr Pro Phe Ala
 100 105 110
 Ala Pro Ile Ala Ala Pro Val Ala Ala Tyr Thr Ala Pro Ile Ala
 115 120 125
 Ala Ala Ala Pro Val Leu Leu Lys Lys
 130 135

<210> 31
 <211> 411
 <212> DNA
 <213> Drosophila melanogaster

<400> 31
 atgaaattcc tcgccgtctg cttcttcgct gttgtggctg tggctgctgc caaaccggt 60
 attgtggctc ctctggccta caccgctccg gctgtggtgg gcagtgccgc ctacgtggct 120
 ccctacgcct ccagctacac cgccaactcg gtggcccaca gcgccgctt cccagctgcc 180
 tacaccgccg cctacactgc tcccgttgct gctgcctata ccgctccagt ggctgctgct 240
 tataccgctc cagtggccgc tgcgtacgcc gcccagctg cctataccgc tgcttacacc 300
 gccccattg cccgttatgc cgccaccccc ttgcgagcac ccacgcgcgc tcccggtggct 360
 gccgcctaca ccgcccccat cgccgcgcgt gccccagttc tgctgaagaa g 411

<210> 32
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 32
 Met Lys Leu Val Thr Ile Phe Leu Leu Val Thr Ile Ser Leu Cys Ser
 1 5 10 15
 Tyr Ser Ala Thr Ala Phe Leu Ile Asn Lys Val Pro Leu Pro Val Asp
 20 25 30
 Lys Leu Ala Pro Leu Pro Leu Asp Asn Ile Leu Pro Phe Met Asp Pro
 35 40 45
 Leu Lys Leu Leu Leu Lys Thr Leu Gly Ile Ser Val Glu His Leu Val
 50 55 60
 Glu Gly Leu Arg Lys Cys Val Asn Glu Leu Gly Pro Glu Ala Ser Glu
 65 70 75 80
 Ala Val Lys Lys Leu Leu Glu Ala Leu Ser His Leu Val
 85 90